U.S. Army Corps of Engineers Nashville District P.O. Box 1070 Nashville, TN 37202-1070

CHANGE SERVICE REQUESTED

PRSRT-STD U.S. POSTAGE PAID NASHVILLE, TN PERMIT NO. 559

### Just To Be On The Safe Side ...

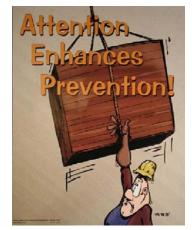
by John Tibbels

n unsafe habit can cause real trouble sooner or later. By A practicing the same unsafe habit over and over, people naturally begin to think that they won't get hurt when doing that. For example: a driver "blows" a yellow light without being in a collision; or a worker goes several days or weeks without wearing personal protective equipment (PPE) without being injured.

These experiences are the beginning of real danger because the person begins to think that the activity isn't necessarily unsafe. Much of it can be placed on the person's perception of their control over the activity. If they think they have control over the situation, they will take

The problem with this thinking is that of 100 people who think they have control over any specific situation, only about 65 percent actually do. That means that 35 percent of the time a person who disregards a safety rule will NOT have control and could be injured or cause an

Experts tell us that the average risk taker (someone who believes they can flout safety rules) will generally perform an unsafe act about 300 times before they



experience adverse consequences, like an accident or injury. After a person has gone that long without adverse consequences, they may begin to believe that other safety rules don't apply to them. Some start to ignore the most basic of safety rules by driving unsafely or by taking risks when they enter a trench or confined space. Others become careless about safety issues and begin to believe that "it can't happen to me." That is when they find themselves in trouble. This kind of lesson was pointedly learned in 1991 in North

In September of 1991, a fire broke out in a chicken plant. Fueled by the cooking grease, chicken feathers, and chicken fat,

as well as other flammables, the fire roared through the plant.

As employees, many of them immigrants and less educated persons who would not have paid attention to exit doors, tried to escape, they found themselves trapped by the locked doors. The first ones to the doors were crushed against the doors by the panicked employees behind them.

In some cases they were trampled by the frightened workers who tried to get to the doors, in spite of the already clogged exit path, by climbing over the bodies of coworkers.

When the fire was out and authorities entered to assess what had caused the fire, they found all these poor workers piled on top of each other at the locked exit doors. They had all died as a result of shortsighted planning.

Nothing bad had happened *before*, they had reasoned, so they hadn't thought about changing it. That is how people think - employees, supervisors, managers, directors, even company presidents – "nothing bad has happened, so far, why should we worry about it?"

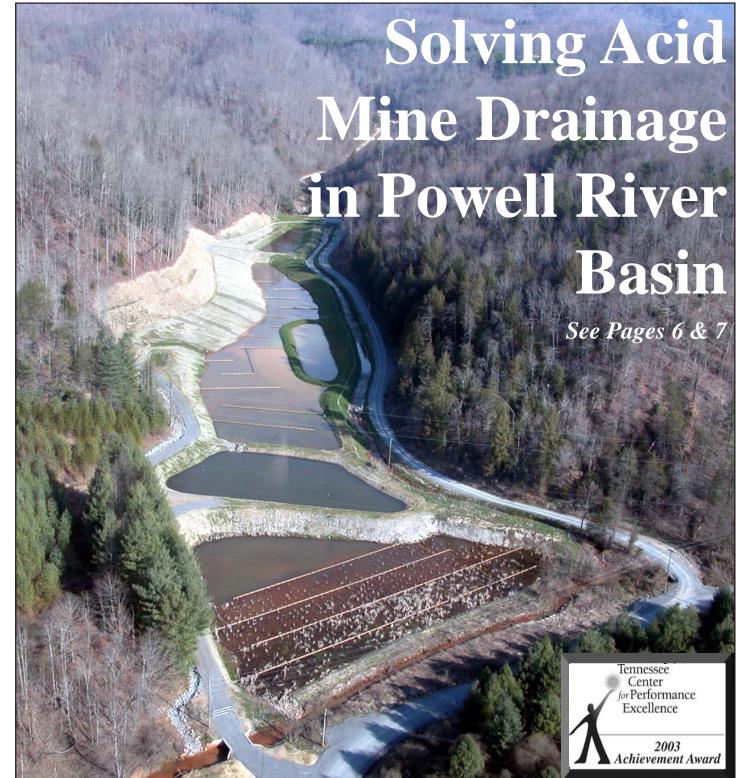
It doesn't matter how long you have done something unsafely – no matter what it is – it will catch up with you, sooner or later, and *somebody* will have to pay the consequences.

12 District Digest August 2004



# Us Army Corps of Engineers® Nashville District District District District

Volume 104, Number 8 Respected-Responsible-Reliable



### **Contents**

From Where I Sit 3
June Employee of the Month 3
Swor Chosen for USACE Planning Award 4
Agencies Sign Agreement to Fund Wolf Creek/Center Hill Work 5
Ecosystem Sites Completed to Correct Acid Mine Drainage 6
Nashville District Wins Chief of Engineers EEO Award 8
July Storms Wreak Havoc at Two Corps Lakes 8
Retiree Recalls District's WWII Mission9
The Corps Crowd 10
Joe Faustina Gets Goodies from 'Home' 10
Local Modem Pool Going Out of Service 11
Division Engineer Conducts Townhall 11
Just To Be on the Safe Side 12

#### **Beware...Computers are Monitored!**

All DoD computer systems, including all related equipment, networks and network devices (including Internet access) are provided only for authorized U.S. Government use. DoD computer systems may be monitored for all lawful purposes, including to ensure their use is authorized, for management of system, to facilitate protection against unauthorized access, and to verify security procedures, survivability, and operational security.

Monitoring includes, but is not limited to, active attacks by authorized DoD entities to test or verify the security of this system. During monitoring, information may be examined, recorded, copied, and used for authorized purposes. All information, placed on or sent over any DoD system may be monitored. Unauthorized use of a DoD computer system may be subject you to criminal prosecution. Evidence of unauthorized use collected during monitoring may be used for administrative, criminal or other adverse action. Use of all DoD computer systems, authorized or unauthorized, constitutes consent to monitoring for all lawful purposes.



photo courtesy of Virginia Department of Mines, Minerals and Energy

### On the Cover

The Bog Site of the Ely and Puckett Creek Ecosystem Restoration Project is shown. It contains three Successive Alkalinity Producing (SAP) System treatment cells (the darker ponds pictured at the top, right and middle bottom) and two wetland areas (middle and bottom). This site had abandoned coal mines in the hills to the right and left of the site and required more cells than the Everglades site to clean the acid mine drainage water.

For more photos, see pages 6 and 7.

### **District Digest**

**Commander** Lt. Col. Byron G. Jorns

Public Affairs Officer Ed Evans

**Editor**Dave Treadway

Online Editor Steve Foshee

Circulation IMO (Mail Center)

The District Digest is an unofficial publication authorized under the provisions of AR 360-1. It is designed through desktop publishing and printed by offset process for the Nashville District, U.S. Army Corps of Engineers. Circulation is 1,600.

The editorial views and opinions expressed are not necessarily those of the U.S. Army Corps of Engineers or the Department of the Army.

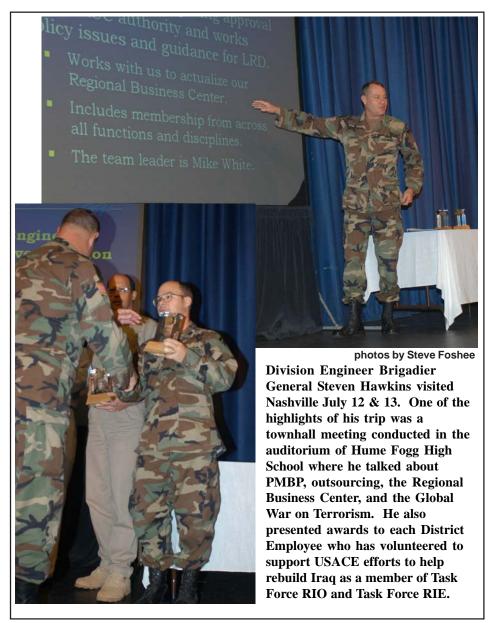
The District Digest is printed monthly and is a Command Information publication of the Nashville District, U.S. Army Corps of Engineers.

Articles, photographs, and other contributions are welcomed and encouraged. The editor reserves the right to make editorial changes to all material submitted for publication.

Story ideas and articles may be submitted to P.O. Box 1070, Nashville, TN 37202-1070. Details may be obtained from the editor at (615) 736-7161.

Written material may also be sent electronically to the editors at the following e-mail addresses: <a href="mailto:david.s.treadway@usace.army.milsteven.c.foshee@usace.army.milsteven.c.foshee@usace.army.mil">david.s.treadway@usace.army.milsteven.c.foshee@usace.army.mil</a>

Information about the Nashville District may also be found on the District's homepage at: <a href="http://www.lrn.usace.army.mil">http://www.lrn.usace.army.mil</a>.



Helen Jeffreys (right), a lock and dam operator at Wheeler Lock, smiles after accepting a certificate from Lockmaster Gary Bowling following a ceremony June 30 when she retired from the Corps after more than 26 years of service.



# **Local Modem Pool Going Out of Service**

by Emily Manns, IM

he Nashville District's local 'modem pool' will be going out of service on October 1, replaced by a new corporate modem pool. A 'modem pool', technically referred to as RAS (Remote Access Server), allows users to connect to the Nashville District network from home or hotel to work or check email.

The new corporate modem pool has been described as better, more reliable equipment for this capability, but with new equipment comes a new way to connect. The new modem pool offers two phone numbers in distant locations to make a connection; the Central Processing Center in Vicksburg, Miss., and the Western Processing Center in Portland, Ore. The new pool requires users to connect using VPN (Virtual Private Network) software. VPN uses security mechanisms such as encryption to ensure that only authorized users can access the Nashville District network, and that the data cannot be intercepted. It acts as a secure tunnel into the domain. A user connects to the internet through their ISP (Internet Service Provider) or through a cable modem, then connects to the domain through VPN. The software treats your computer like it is in the building. You can check e-mail, visit all .mil websites, and create desired network drives, such as the Q drive.

If you currently use the local and tollfree phone numbers to dial-in, you will need to visit the Helpdesk to receive your VPN application package. Without VPN access, you will not be able to dial-in to the new corporate modem pool after Oct. 1. When applying for your VPN access, you will be required to sign an agreement that says you will keep your personal computer up to date with all of the latest security patches, and will install up-todate anti-virus software. VPN is only for those users needing to dial-in from outside the network. This software will not be installed on workstations at your desk unless your workstation is also a laptop on a docking station.

Employees with questions should contact the **Helpdesk** at 2030.

2 District Digest August 2004 August 2004 District Digest 11

## The Corps Crowd

#### Congratulations to...

... Jackie Vied upon his retirement July 29, after 32 years of service.

...Victoria Caldwell, program analyst in PPPMD, who was selected for a sixmonth developmental assignment at the Pentagon with the Office of the Under Secretary of Defense, Comptroller.

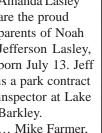
...Jonathan Jarrett, information specialist in the Management Support Branch, Operations Division, and son of Anita Jarrett, Navigation Branch, who was married on July 17, to Lane Jennings. Lane is currently working on her Masters degree in Public History at MTSU. The couple honeymooned in the Dominican Republic.

...to Marva Morris, EEO Officer, her staff, team of EEO Counselors and SEP Committee members, AMIE (Advancing Minorities' Interest in Engineering) Committee members, and others for efforts that resulted in Nashville District being recognized as the recipient of the FY03 Chief of Engineers EEO Award. This award recognizes the District's accomplishments in the area of EEO and affirmative employment. Way to go Team Nashville!

...this year's officer slate for the Music City Chapter of Military Comptrollers. They are President Christine Rossi, Cheryl Wallace as 1st VP/Programs, Amanda Gill and Dana Gill split the duties of 2nd VP/Publicity, Sandra Jackson as 3rd VP/Member, Barbara Stack as the new Treasurer and Myrna King as Secretary.

Baby Brigade to...

... Jeff and Amanda Lasley are the proud parents of Noah Jefferson Lasley, born July 13. Jeff is a park contract inspector at Lake Barkley.



... Mike Farmer, chief of Engineering-Construction



Branch, and Diann Farmer, budget analyst in Real Estate, are brand new grandparents. On July 8, Eva Kathryn was born to their daughter and son-in law, Karen and Frank Barrera, weighed in at 7 pounds, 15 ounces and was 20 and 1/2inches long.

...Cory and Julie Morgan are the proud parents of Emma Alyne Morgan, born July 20, at 6 pounds, 10 ounces, and 20



Eva Kathryn

inches long. Cory is a structural engineer in Design Branch.

#### Welcome to...

...Kathleen Dalle, mechanic A, Center Hill Powerplant. Kathy formerly worked at Wolf Creek Powerplant.

...Anthony A. Certeza, maintenance worker, joined the Navigation Branch, Plant Unit.

#### **Speedy Recovery to...**

...Juanita Young, mother of Wanda Coleman. Following surgery on July 6, she and family members have spent a three-week vigil at the hospital. Please continue to pray for this family.

#### Sympathy to...

...the family of Mike Adcock, park ranger at Center Hill Lake, whose mother, Edith Adcock, passed away July 15.

...Donnie Dixon, lock & dam operator at Wilson Lock, whose brother, Charles Dixon passed away July 27.

...the family of Ralph K. Cheatham, who passed away on Feb. 17. He was a powerhouse superintendent at Wolf Creek. Cheatham and J. Percy Priest.

...to Channika Williams, EEO Office student aid, whose paternal grandmother, Beatrice Williams, passed away on July 27.

#### Thank you...

... "Again I find myself in the position to try to offer thanks to all the many friends that have offered comfort and support after the death of William. My daughter Stacey, my son-in-law Lance and myself were truly overwhelmed by the cards, food, flowers, visits, memorial donations, and continuing cares and concern. This has taken a toll on our little family, but we find comfort in knowing that William had a lot of years that he would not have had without his heart transplant, and that when his time came we were all together. He had the time with our two granddaughters that gave him great joy. He kept bouncing back and never



Joe Faustina was amazed when the mail truck arrived August 1 and all the boxes it unloaded were for him. Items collected by District employees arrived safely and he wanted to let everyone | friendships he know how much he appreciated them. "I just want to thank you and everyone who donated the food for me," said Faustina. "I think I have enough food here to last the next 6 months! I have ramen noodles and everything else. I am speechless. I can't express how I feel. I thank you from the bottom of my heart."

At the time of his death, he was in the process of trying to return to work. Please know that he was truly proud to have been an employee of the Corps of Engineers and honored to have the had acquired over the years. As am I." Janice Nelson 🕍

gave up hope.

### **Lieutenant Colonel Byron Jorns**

### From Where I Sit

olks,...for those of you who were unable to attend July's townhall meeting with BG Hawkins, your Nashville District received four of the top six Division awards. This is a tremendous recognition of the talent and teamwork that makes this a great organization. Clearly, the Nashville District is among the best out there.

...to help maintain our great reputation and to continue to improve, I want to emphasize the importance of conducting After Action Reviews (AARs). This is a perishable skill that I think has been lost on many of us. AAR's seem to often raise thoughts or visions of something gone "bad"...or "poorly executed"...or "unsuccessful".

#### Communication

This is a narrow view of the AAR intent and purpose. AAR's are intended for all events (good and not-so-good) as a means to capture what we like so we know how to repeat success and avoid repeated shortfalls. It's a form of "kaisan" or the pursuit of continuous improvement.

...I was raised on the Army AAR culture. It's what helped make our allvolunteer army the greatest force in the world. By taking a few moments to look at ourselves when a mission is complete, we capture the "take aways" of what just transpired.

Within the green-suit world, AAR's do not have a negative connotation. It's just something that you do...to get better...to learn from mistakes (its not a blame game)...to reinforce what went

Our new Deputy for Civil Works, BG(P) Don T. Riley, has placed renewed emphasis on AARs. In a recent briefing, he put the format very succinctly; "What was supposed to happen? What did happen? Why did it happen that way? And how will we improve the way we do it next time?"

The expectation is that we'll conduct these after every major undertaking. These AAR's will be on record and subject to Headquarters review. This is

a good thing...an opportunity to showcase what we do and how we do it. I understand that some folks may be a little rusty on the process. It's not complicated.

The Chief of Information Management has placed the AAR process and proper format for submission on Public Folders/All Public Folders/CELRN Public Folders/After Action Reviews. As you know, our LDP team in 2002 established the format in those public folders for ease of use and documentation. I expect each division to regularly populate these folders with your own AARs. It comes down to immediate supervisors and middle managers to take the lead. I ask for your energetic support. We'll become a better organization because of it.

And now before I sign off, a few words about safety.

Concerning the use of seatbelts and how they contribute to safety, I want to remind everyone just how important it is to wear your seatbelt. There are still some people who don't believe that seatbelts are valuable.

As an unrestrained person in your vehicle, you can sustain serious injury



or death even at the slow speed of 30 mph. If you are riding with someone, who is not wearing a seatbelt, your chances of being injured in a crash increase by 25 percent. In one test, an unrestrained child test dummy crushed a restrained adult test dummy against the interior of the vehicle with enough force to break arms, ribs, and legs.

For example, if an unrestrained 10pound person is thrown against you after the vehicle is struck at 30 mph, they will strike you with a force of 3000 pounds - that is over one and one-half TONS. Can you withstand that kind of force?

For the sake of yourself and your family, always buckle-up. You may be glad you did!

### June Employee of the Month

am Reams, maintenance worker at Laurel Power Plant, was chosen as **L** the Nashville District Employee of the Month for July. She was selected



**Pam Reams** 

setting the standard for other employees at the project.

Her willingness to try any task is an inspiration to co-workers and has proved instrumental in maintaining the excellent productivity level at the Laurel Project. As the primary Impact Card holder at Laurel Power, she has assisted many other cardholders with purchases and the documentation process, not only at the Laurel Project but also at other hydropower projects throughout Nashville District. Her infectious enthusiasm inspires others and contributes to the success of project missions at Laurel.

Selected individuals personify the seven Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage.

10 District Digest August 2004 August 2004 **District Digest 3** 

# Swor Chosen for USACE Planning Award

by Dave Treadway

nvironmental Planner Tom Swor was honored August 9 in St. Louis, Mo., with the 2003 USACE Planning Excellence Award, a tribute to his emergence as a topical expert and regional resource for studies and environmental analyses.

Swor's selection is based on a number of factors but his primary focus in 2003 was as leader of the Environmental Team for the Ohio River Mainstem System Study (ORMSS).

In that role, he has developed a number of firsts. He created a framework and processes for conducting a comprehensive Cumulative Effects Assessment (CEA) and Programmatic EIS to evaluate impacts of past, present, and reasonably foreseeable future actions on resources, ecosystems, and human communities along the Ohio River. This is the first attempt in LRD to produce a truly comprehensive, system-wide approach to cumulative effects assessment.

Swor co-instructed the first CEA training course specifically tailored to the Corps' Regulatory Permit Program in November 2003. Much of the course content was based on analytical techniques developed from ORMSS work. His audience included employees from Corps Regulatory Branches throughout LRD.

He became the first environmental professional in LRD to serve in a position that provided a prototype for subsequent establishment of Regional Technical Specialists.

In 2003 he helped organize and was the moderator of the first virtual joint meeting of all LRD Planning Communities of Practice. Through his ability to accept and accomplish those challenges never before attempted, the Nashville native established a new environmental leadership throughout LRD that can serve as an example to the rest of the Corps of Engineers, other federal agencies, and the international community.

Tab Brown, formerly with the Nashville District and now chief of Planning & Policy for LRD and the person appointed as chairman of the oversight committee for ORMSS, often worked with Swor and explained the significance of the award.

"This award recognizes the Corps planner," said Brown, "who has the most



Tom Swor

outstanding achievements for the year."

Veronica Rife, who is the Project Manager for the ORMSS Study had high praise for Swor.

"Tom's selection is not surprising at all," said Rife. "Although Tom could not have accomplished this without the input and support of the ORMSS Environmental PDT, he has provided the strong leadership and guidance needed for this team to succeed. He is very dedicated to his work. The award is well-deserved."

The man widely considered one of the experts in his field attended Tennessee Tech where he received a bachelors degree in wildlife management and a masters in biology. He then worked for Tennessee Valley Authority for nearly 15 years before coming to Nashville District in 1988.

The District's senior environmental planner inherited the team leader job for the ORMSS in February 2000 and now admittedly spends 60 to 70 percent of his time on what has proven to be a groundbreaking study.

"We have performed a Cumulative Effects Assessment," explained Swor, "for the entire 981-mile reach of the Ohio River and the floodplain to look at the resources over the next 60 years. Besides the effects that Corps navigation improvements might have on the river and its resources, we had to ask 'what else might other people be doing that would affect the same resources'?

"The requirement," claimed Swor, "to do a cumulative effects assessment has been part of the National Environmental Policy Act of 1969 (NEPA) since 1978 but nobody really knew how to do it, what it involved, and so forth until 1997 when the President's Council on Environmental Quality issued a guidance document that described a process by which cumulative effects should be considered in EISs.

"Throughout this whole study we have had to develop a number of detailed processes to work through the steps prescribed in the guidance document. One of the more difficult challenges we had to take on early in the process was how were we going to determine what are 'reasonably foreseeable actions'. What makes them reasonably foreseeable? We eliminated speculation from the determination of reasonably foreseeable, because that could go on forever. In order to be considered reasonably foreseeable, we had to find that there had been a credible planning effort for each action."

Swor had to capitalize on the collective environmental talent in Pittsburgh, Huntington, and Louisville Districts and supplemented this talent pool with contractors recognized internationally for their environmental expertise. Further evidence of the farreaching nature of the ORMSS effort was Swor's continuing leadership of a large (approximately 40-member) interagency environmental team made up of representatives from all six states along the Ohio River, three regions of the USFWS, three regions of USEPA, along with USGS, ORSANCO, and several nongovernmental environmental interest groups.

His work on the study is far from complete.

"We have about a year to go," explained Swor. "Work will increase during the writing and editing stage of the project. We have a lot to do just to produce the report and then to go through the various reviews, including a complete Independent Technical Review. Then we will have to put it out to the public for comment as required under NEPA."

The nomination of Swor called him, "...a working demonstration of the Corps philosophy – "Essayons, Let us try."

A Look Back In Time

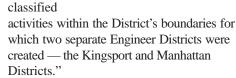
### **Retiree Recalls District's WWII Mission**

by Dave Treadway

The role of the Nashville District during World War II is detailed to some extent on its website (http:// www.lrn.usace.army.mil/history/ ww\_ii.htm). But after examining the site,

District retiree
Hobart Parish
felt like
something was
missing. He
was right.

was right.
Historian Dr.
Leland R.
Johnson, in his book,
"Engineers on the Twin
Rivers", (1978)
referred to
"...certain highly



Dr. Johnson provided other details. "During the summer of 1942," wrote Dr. Johnson, "citizens of Anderson and



Roane Counties, near Knoxville, Tenn., were mystified by the presence of strangers, some khaki-clad, who carried surveying instruments. When asked what they were surveying for, the reply was quick: '75 cents an hour.'"

Parish recently provided a first-hand account of the role some District employees played during that trying time.

Early in 1942, Parish, as the District dispatcher, was assigned to drive an appraiser in a 1940 Ford sedan over mostly unpaved roads from Oliver Springs, to Lake City, up and down both sides of Clinch River and Emory River, and up to the plateau toward Oakdale and Crossville to "make a preliminary Survey and Appraisal of land in the area".

"We were there probably less than a week," recalled Parish, "and using most of the daylight hours in our ramblings. We had no idea what was going to be built. The Orders and Regulations at that time had a short description of the Manhattan District that identified it as a District to be formed for Special Purposes and could be placed at any location.

He recalled that 34 new Studebaker Champions were sent to Oak Ridge to facilitate the Real Estate acquisition

process. Managers reasoned that parts from one or more cars could be used to keep the majority in running order.

"A number of 20-ton dump trucks," said Parish, "(the largest I had ever seen) were transferred to the newly formed Atomic Energy Commission from the Manhattan District. Nashville District assisted in the transfer of Property and Real Estate, everything from light and telephone poles to buildings. equipment, etc., even people. We had to have a different badge for each area and we had to turn them in and if we needed to go back to an area we would go back to the Badge

Control Office and pick up our Badge for that area.

"Most visitors to the area arrived by train," said Parish. "One who came a number of times was Colonel (later General) Leslie Groves. We would always furnish him a car to make the trip to Oak Ridge. He found out early on that colonels carried less weight with scientists, physicists, and professors so, decked out in the standard suit and tie allowed in civilian areas, he became 'General' Groves, the rank he was already selected to wear but would pin on later.

"One time when Colonel/General Groves was waiting on his car and sitting in my very small office I suggested Oak Ridge Demolition Project as a description to use for the work we did there.

He said, 'Okay,' without the slightest hesitation and so that is what I used."

"The complete answer to this question was not to be revealed for three years," continued Dr. Johnson in "Engineers on the Twin Rivers", "and in the meantime strangers thronged into the hills and a new town, Oak Ridge, mushroomed overnight. By early 1943, the Engineers had completed acquisition of land for the Manhattan District and a gigantic complex of industrial might began to rise, built by 47,000 men under the lash of hard-nosed Engineers. By 1945, 82,000 men were engaged at Oak Ridge. Very few had any idea what they were really doing."

Parish and the rest of the world found out on a very hot day in August 1945.

"I never knew what Oak Ridge was all about," admitted Parish, "other than being very secret, until I was driving up Seventh Avenue one day about Union Street and I heard on the radio about the Atomic Bomb that was dropped on Japan and they gave some information about Oak Ridge playing a part in the making of the Bomb."

"A few tense days later," wrote
Johnson, "on board the battleship
Missouri in Tokyo Bay, General
MacArthur accepted the surrender of the
Empire of Japan, and witnessing the event
was a representative of the Nashville
District, Colonel Orville E. Walsh, who
had initiated the District's military
construction mission five years before."

Project Manager LaNita Bonds and members of the Project Delivery Team perform cost estimating on site as part of the final planning process for a Corps project at Ditto Landing. Construction is expected to begin next fiscal year and will involve riprap to protect cultural resources from the effects of erosion. Work is expected to be done from land due to the presence of endangered mussels in the waterway.

4 District Digest August 2004 August 2004 District Digest 9

### Nashville District Wins Chief of Engineers EEO Award

by Marva Strong Morris, EEO Officer
ast month Nashville District was selected as the recipient of the Chief of Engineers Equal Employment Opportunity (EEO) Award for FY 2003. The award recognizes the District's accomplishments in the areas of EEO and affirmative employment.

Nashville achieved increased representation among most minority groups, experienced the lowest EEO complaint activity in 10 years, conducted recruitment outreach, and implemented a variety of initiatives to eliminate and overcome barriers to the employment of minorities and women.

Consideration of Others (CO2) sessions, Prevention of Sexual Harassment (POSH) training, supervisor/ team leader training, career enhancement workshops, minority college recruitment, the Leadership Development Program, the Employees Achieving Greatness and Leadership Excellence (EAGLE) Program, mentoring programs, the Education Seminar and Conference for

Administrative Professionals' Enrichment (ESCAPE), and long-term training assignments are but a few of the factors in our EEO success in FY 2003.

When notifying me that we had won the award, John Sellmansberger, Deputy EEO Officer, Headquarters USACE EEO Office, stated that Nashville was a "consistently high-performance [EEO] program."

That he would make such a statement is due in large part to a crackerjack EEO Office team, whose assistance and advice are relied upon and sought throughout the Corps. Kudos go to EEO Specialists Carol Haynes (now assigned as EEO Officer in the Europe District) and David Claussen; Stephanie Coleman, EEO Assistant/Special Emphasis Programs (SEP) Manager; and Student Aids Shonka Dukureh (former) and Channika Williams.

However, it would be remiss of me to suggest that one office alone deserves the credit for this achievement. Many others made significant contributions to our EEO Program—people like our collateral-duty EEO counselors, members of the SEP

Committee (who voluntarily give of their time and labor), the District Labor Counselor, the Human Resources Office staff, members of the Advancing Minorities' Interest in Engineering (AMIE) Committee, and the supervisors and managers who take seriously their EEO and affirmative employment responsibilities. And I can't forget the employees who do their part to help maintain a work place that is free from harassment, employees who treat their fellow workers with dignity and respect. The bottom line is that our success is the result of a total team effort.

It's indeed rewarding to have been honored with the Chief of Engineers EEO award; however, we can't afford to rest on our laurels. Though we've made progress, there is still much work to do if we want to achieve a model EEO program.

(Editor's note: District Engineer Lt. Col. Byron Jorns and EEO Officer Marva Morris accepted the Chief of Engineers EEO award August 9 at the Senior Leaders Conference in St. Louis, Mo.)

### July Storms Wreak Havoc at Two Corps Lakes

Thunderstorms accompanied by extremely high winds on the night of July 13 completely destroyed eight slips, knocked downed a power line, pulled one large dock away from its spud poles, and damaged the roof of the Cherokee Resort and Steakhouse on Old Hickory Lake. Despite damage estimated at between \$350,000 - \$400,000, which will include the cost of cleanup, only one boat was damaged and no injuries were reported. On the same night, winds downed a tree which fell on Picnic Shelter #4 at Rockland Recreation Area but damage was estimated at



photos provided by Rangers Sondra Hafling and Tim O'Connell

only \$800. The storms overturned a camper at Dale Hollow's Willow Grove Recreation Area but the resident inside was not injured.

Wolf Creek and Center Hill Rehab

# Agencies Sign Agreement To Fund Work

Story and photo by Dave Treadway

n what one partner called "a Threshold Agreement", Nashville District signed a partnering document July 14 with several sponsors to accomplish much-needed maintenance work at both Wolf Creek Power Plant and the Center Hill Power Plant.

The Southeastern Power
Administration, Big Rivers Electric
Corporation, Municipal Energy Agency
of Mississippi South Mississippi Electric
Power Association, East Kentucky Power
Cooperative, Inc., Tennessee Valley
Authority, and the Tennessee Valley
Public Power Association agreed to fund
\$5 million worth of work.

Those funds will be used to rewind Generator Number 6 at Wolf Creek and to rehabilitate and Repair the Crane at Center Hill.

"I would call this a threshold day," said Gary Brock, Director of the Tennessee Valley Authority, "due to the persistence of Team Cumberland. This is a very important agreement. We all recognize the importance of the hydro resource, its flexibility, the low cost, and the renewable energy through this valuable resource."

Nashville District's Jerry Brown will act as project manager for the rehabilitation effort and did much of the coordination over the course of 21 months between the various agencies to help make the Memorandum of Agreement possible.

"Team Cumberland," said Brown, "has worked really hard to arrive at the point where we are today to forge an agreement to help us all share resources and get some modernization and rehabilitation started on our hydropower infrastructure."

Some parties signed in absentia. Jeff A. Garner from the City of Henderson, Ky., Brown Thornton, R. W. Beck, Inc., from Kentucky Municipal Systems, Jack W. Simmons, President & CEO of Tennessee Valley Public Power Association, Charles A. Borchardt from Southeastern Power Administration, Gary Brock, Manager, Navigation and Hydraulic Engineering, Tennessee Valley



District Engineer Lt. Col. Byron Jorns is joined at the signing ceremony July 14 by Charles A. Borchardt (left) from Southeastern Power Administration, and Gary Brock, Manager, Navigation and Hydraulic Engineering, Tennessee Valley Authority.

Authority, Ronald D. Brown from East Kentucky Power Cooperative, Inc., and William Hutchison, Systems Department Manager, Southern Illinois Power Cooperative joined District Engineer Lt. Col. Byron Jorns at the District Office for the historic signing ceremony. Each of them added to what Brock had to say.

"While each of us look at this issue from a slightly different point of view," explained Ron Brown, "we use this to serve our customers and keep the lights on. We're very much interested in seeing this equipment is maintained properly, is reliable, and can provide us power at a fair cost. I hope this is step one of an ongoing program for which we can help provide funds needed for maintenance."

Jack Simmons said the road has been long to arrive at this point.

"I have been involved in the effort since 1983. It is interesting to see how things have changed over time, but one of the things that hasn't changed is the difficulty of getting money to the Corps so that we can get something done. I hope this is just the first step because it covers just a small piece of the work that needs to be done on these projects. We are certainly supportive of getting all the work done. We're on your team!"

The Director of SEPA thanked those who were present for the ceremony.

"First of all," said Borchardt, "I want to thank the customers for your faith in us, and, for want of a better word, this 'scheme' to get money to the Corps. I also want to thank you for your faith in the Corps that they will use this money wisely and judiciously so they can get some well-deserved repairs and upgrades completed."

Lt. Col. Jorns called the document a great charter to help the Corps maintain the power infrastructure in the Cumberland valley.

"We view this as a baby step," said Lt. Col. Jorns, "and hope this is a stepping stone to greater things later on. We hope to demonstrate our good stewardship of the maintenance dollars that have been provided. This is a great public-private relationship that is recognized throughout our Chain of Command, all the way to the Assistant Secretary of the Army for Civil Works."

Work at Wolf Creek will begin by Nov. 1 and completion is expected by March 2006. Rehab of the crane at Center Hill will begin Nov. 1 and is expected to take 10 months.

8 District Digest August 2004 August 2004 District Digest 5

# Ecosystem Restoration Sites Completed on Ely Creek in southwestern Virginia

by Bill Peoples

wo ecosystem restoration sites were recently completed on Ely Creek near St. Charles in southwestern Virginia, part of the Ecosystem Restoration Project to negate the effects of acid mine drainage in the Powell River watershed.

Two more sites will be completed on Puckett Creek to complete this project, which is part of a larger effort to restore the ecosystem of creeks decimated by acid mine drainage from abandoned coal mines.

The effects of acid mine drainage had left Ely and Puckett Creeks devoid of aquatic life and they were among the most impacted streams in the former coal-mining area of southwestern Virginia.

"Completing these two sites marks a great beginning for ecosystem restoration in this area that has been devastated by acid mine drainage," said Jeff Linkinhoker, project manager for the Corps' Ely and Puckett Creeks Ecosystem Restoration project. "This is a success story of not only ecosystem restoration, but also of partnering between local, state and federal government agencies to improve the lives of the people of this area."

The \$1.8 million project is being cost-shared (65 percent federal/35 percent non-federal) by the U.S. Army Corps of Engineers and the sponsor, Lee County, Virginia, which received most of the funding through the Virginia Department of Mines, Minerals and Energy. The other project partner is the LENOWISCO Planning District Commission with cooperating agencies that included: the

Office of Surface Mining, the Virginia Department of Environmental Quality, the Virginia Department of Conservation and Recreation, the Virginia Department of Game and Inland Fisheries, The Nature Conservancy, Tennessee Valley Authority, and the U.S. Fish and Wildlife Service.

#### **Funding**

Funding for the project has come from various sources. The U.S. Army Corps of Engineers provided 65 percent of the funding, almost \$1.2 million, through Section 206, **Ecosystem Restoration** Program. Lee County contributed more than \$600,000.

The Va. Department of Mines, Minerals, and Energy provided much of the funding through matching funds from the Abandoned Mine Land (AML) 10 percent Acid Mine Drainage Set Aside Program, the Appalachian Clean Streams Program and the Tennessee Valley Authority funds. The AML Set Aside Program is a Department of Interior program that provides funds to states to clean up abandoned coal mines and authorizes up to 10 percent of those funds to be spent on reclaiming acid mine drainage

The Clean Streams Program is a citizen/industry/government program that works to remove acid mine drainage from abandoned coal mines. It uses a combination of private and governmental resources. The Program facilitates and coordinates citizen groups, university researchers, the coal industry, corporations, the environmental community, and local, state, and federal

government agencies that are involved in cleaning up streams polluted by acid mine drainage.

#### **Process**

Cleaning the acid mine drainage is a two-step process. First the contaminated water is piped to a Successive Alkalinity Producing System (SAPS) treatment cell, which neutralizes the acidic water. This pond uses a layer of spent mushroom compost to remove the oxygen from the water. This is done so the metals in the water, such as iron and aluminum, do not settle at the bottom of the pond and clog up the system. The next layer, which is limestone, increases the pH level of the water.

metals in the water.

Sample Location	рН	Total Iron (mgl)	Total Aluminum (mgl)
<b>Everglades Site entering SAPS Cell</b>	3.70	101.0	6.04
Everglades Site exiting wetland	7.10	2.99	<b>Below Detectable Level</b>
<b>Bog Site Entering SAPS Cell 2-1</b>	3.80	11.5	24.6
Bog Site exiting wetland	8.00	0.73	Below Detectable Level

The water then moves to a wetland area where the water is re-oxygenated and the metals fall out. The end result is a rise in the pH level of the water to close to neutral, and the reduction of iron and aluminum to acceptable levels.

#### The Future

The next part of the project, according to Linkinhoker, will be to construct two more sites on Puckett Creek in 2005. The Project Delivery Team is now designing these systems in cooperation with contractors, David Miller and Associates and

> Michael Baker, Jr. Once Puckett Creek is completed, similar ecosystem restoration projects are planned for Straight, Reeds, Jones. Cox, Bundy, Craborchard and Pigeon Creeks, as well as Jordon Branch, all which drain into the

photos by Bill Peoples Powell River. The total costs are estimated at \$10 to \$15 million to restore the water to levels that will support all forms of aquatic life

in these streams. Assistant Secretary of Interior Rebecca Watson, who has oversight of the AML program, visited the Ely and Puckett Ecosystem Restoration Project in late July to see firsthand how funds from the program are being put to use in local projects.

"These are real problems that affect real people," said Watson, assistant secretary for land and minerals management at the U.S. Department of the Interior. "This project is impressive and the passive system is a good way to do it because it will be easier to maintain."



Assistant Secretary of the Interior Rebecca Watson (top left) is briefed by Jeff Linkinhoker, project manager for the Ely and Puckett Creeks **Ecosystem Restoration Project** at the Bog site during the Secretary's visit. Linkinhoker points to two areas where acid mine drainage is seeping from an abandoned coal mine as the parts of the restoration project are shown in the background and at right. The main control structure above regulates how much acid mine drainage water

enters the treatment system.

Linkinhoker, "the water enters with a pH level of 3.80 and exits into Ely Creek with a pH of 8.00, remember 7.00 is neutral, which means the pH of 8.00 water adds a little bit of acid buffering capacity to the stream. The aluminum went from 24.6 where it exits the mine, which is pretty bad, to below detectable levels in the system discharge into Ely Creek. The results are really awesome and we are very happy with the success of the program."

"At the Bog site," explained

The entire system is a passive treatment system that operates on gravity and uses no electricity meaning the operation and maintenance costs are very low.

6 District Digest August 2004 August 2004 **District Digest 7** 

photo courtesy of Virginia Department of Mines, Minerals and Energy

The Everglades Site of the Ely and Puckett Creek Ecosystem Restoration Project is shown. It

raises the pH level of the water. The wetland re-oxygenates the water allowing the metals to fall

contains one Successive Alkalinity Producing (SAP) System treatment cell (the darker pond

pictured at the top) and a wetland area (bottom). The SAP cell de-oxygenates the water and

out. The process has been very successful at raising the pH level and lowering the amount of